

14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function -check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

Table 1
Minimum gage for cord

Ampere Rating		Volts Total length of cord in feet				
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
		240 V	50 ft.	100 ft.	200 ft.	300 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

Additional safety instructions

IMPORTANT

1. Ensure the workplace is tidy.
2. Check the unit for damage before use
3. (connection cable, protective devices, etc.), have defective parts replaced by qualified personnel.
4. This unit corresponds to the pertinent safety regulations. Repairs (e.g., replacement of the power supply lead) may only be performed by a qualified electrician
5. Never work without the safety equipment fitted.
6. Do not use electrical power tools in the rain, in damp surroundings or in the vicinity of flammable liquids or gases.
7. Only use the tool when the handle is dry and free from grease.
8. Avoid contact with earthed components, e.g., pipes, radiators, ovens and refrigerators.
9. Protect the connection lead from heat and sharp edges and route it so it cannot be damaged.
10. Do not remove the plug from the socket by pulling on the cable.
11. Do not pick up the unit by the cable.
12. Keep children and third parties away from the workplace.
13. Keep tools in childsafe locations when not in use.
14. Do not overload the tool.
15. Do not use the tool to perform operations for which it is not suitable.
16. Replace blunt tools in good time.
17. Visually inspect application tools to ensure they are in good working order and suitable for the task prior to setting up the job.
18. Fasten tools securely.
19. Clean the unit thoroughly following all work
20. Disconnect the plug from the power supply when the unit is not in use, before performing maintenance, tool replacement or repair work.
21. Only plug the unit in when the unit is switched off.
22. Always wear protective goggles (danger of tool breakage).
23. If necessary, wear a protective dust mask.
24. Only use appropriate working clothes (no loose sleeves, ties, jewellery).

25. Wear a hair net if you have long hair.
26. Only use accessories and spare parts recommended by PROXXON
27. Observe the max. permitted rotational speed
28. If necessary, use dust-extracting equipment
29. Do not use the tool when you are tired or under the influence of alcohol.
30. Keep fingers away from rotating or fast moving tools (saws, etc.)
31. Keep the operation instructions in a safe place.

This machine is for indoor use only. Do not expose to rain or use in damp locations.

Use only accessories recommended for this scroll saw. Follow the instructions that accompany accessories. Use of improper accessories may cause hazards.

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alternation or modification is misuse and could result in hazardous condition leading to possible serious injury.

To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a power source receptacle during unpacking and assembly. This cord must remain unplugged whenever you are working on the scroll saw.

If any part is missing or damaged, do not plug the scroll saw in until the missing or damaged part is replaced, and assembly is complete. To avoid electrical shock, use only identical replacement parts when servicing grounded tools.

For your safety, never connect the plug to the power source receptacle until the assembly and adjustment steps are completed, and you have read and understood the safety and operating instructions.

To avoid injury from accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source receptacle before changing any parts or tools (i. e. saw blade)

To avoid injury from accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source receptacle before making any adjustments.

For your own safety, do not plug the tool into the power source receptacle or insert the switch key, until the parts are correctly installed and adjustments have been made.

For your own safety, use only saw blades sized and recommended for this scroll saw. Follow the instructions that accompany the saw blades.

To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner, or similar highly volatile solvents to clean the scroll saw .

Do not allow brake fluids, gasoline, or penetrating oils to come in contact with the plastic parts. They contain chemicals that can damage or destroy plastics.

Only qualified service technicians should do all electrical or mechanical repairs.

When servicing use only PROXXON replacement parts. Use of any other parts may create a hazard or cause product damage.

Any attempt to repair or replace electrical parts on this scroll saw may create a hazard unless repair is done by a qualified service technician. Repair service is available at your PROXXON service center (You find the address at the back of this manual)

Safety instructions for all double insulated tools:

1. Replacement Parts:
When servicing use only identical replacement parts.
2. Polarized Plugs
To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

Additional safety instructions for table saws:

WARNING!

For Your Own Safety Read Instruction Manual Before Operating Saw!

1. Wear eye protection.
2. Use sawblade guard and spreader for every operation for which it can be used, including all through sawing.
3. Keep hands out of the line of saw blade.
4. Use a pushstick when required.
5. Know how to reduce risk of kickback
6. Do not perform any operation freehand.
7. Never reach around or over saw blade.

Note:

Keep this instruction manual in an easily accessible place. Only operate this machine if you are qualified to do so and follow the guidelines in this instruction manual.

PROXXON does not accept responsibility for the safe functioning of the machine:

- if it is handled in a manner which constitutes improper use,
- if it is used for other purposes which are not specified in the instruction manual,
- if the safety regulations are not observed.

Warranty claims are invalid if

1. the machine is incorrectly operated,
2. the machine has not been sufficiently maintained.

In the interests of your safety, please always observe the safety regulations. Only use genuine PROXXON spare parts. We reserve the right to make further alterations for the purpose of technical progress. We wish you every success with your machine.

Description of the machine

The DS 115/E cuts soft wood up to max. 40 mm, hard-wood up to 10 mm, boards and non-ferrous metals up to 2 mm. Electronic speed regulation enables adaptation of the stroke rate to suit the material to be sawed. Thanks to the vertical adjustment, saw blades of different lengths can be used (60 to 140 mm). The integrated blowing device reliably ensures a clear view of the sawing line.

The basic equipment includes:

- Five saw blades with different teeth
- Longitudinal stop
- Angle stop
- Two fixing bolts
- Rubber adapter for the vacuum cleaner connection
- A hexagon key.

We recommend original PROXXON replacement saw blades.

General view (Fig. 1):

1. Saw blade
2. Upper locking ring
3. Tightening screw for saw blade
4. Air hose
5. Vertical adjustment
6. Clamping screw for guide bar
7. Saw bow
8. Angle stop
9. Clamping screw
10. Hexagon key
11. Sliding door with plug
12. Longitudinal stop
13. Clamping screw
14. Scale for longitudinal stop
15. On/off switch
16. Speed regulation
17. Saw blade guide and air duct
18. Storage box for saw blades
19. Pipe union for vacuum cleaner
20. Holes for attachment
21. Rubber adapter for vacuum cleaner connection

Technical data

No. of strokes:	150 - 2500/min
Vertical lift :	7 mm
Generated noise:	≤ 70dB/A
Weight:	2.8 kg

Dimensions :

Bearing surface:	160x160 mm
Reach:	300 mm

Motor:

Revolutions:	8,000/min
Voltage:	115 V 60Hz
Performance:	85 watt

Double insulated tool
For indoor use only!



Operation

Before start-up:

Mounting the machine

The scroll saw must be fastened onto a sturdy wooden board using the enclosed fixing bolts 1 (Fig. 2) The board can then be fixed onto a sturdy table using two fastening clamps.

Fastening the saw bow

Fasten the saw bow with the two screws included onto the rear side of the machine.

Vertical adjustment

The DS 115/E has vertical adjustment, so saw blades of different lengths can be used (60 to 140 mm). Higher stability of the blade is achieved by using shorter saw blades (the blade does not deflect to the rear under pressure). This is particularly important when sawing boards or non-ferrous metals. In such cases, we recommend shortening the saw blade with pliers to a length of 60 mm (danger of injury – wear safety goggles) and fixing the vertical adjustment on the lower position.

1. Release screws 1 (Fig. 3).
2. Bring the vertical adjustment 2 into the required position.
3. Re-tighten the screws 1.

Fitting the saw blade

1. Open the sliding door 11 (Fig. 1).
2. Attach the device to the mains and briefly switch on. Switch off the device in such a way that the lower locking ring 1 (Fig. 4) remains in the top position. Several attempts may be necessary here.
3. Pull out the mains plugs
4. Unscrew the screw with the Allen key 3 at the lower locking ring by max. 2 revolutions.
5. Insert the saw blade with teeth facing downward so far into the lower locking ring, until the first teeth are below the upper edge of the work surface.
6. Align the saw blade perpendicularly at the saw blade guide 2 and tighten the screw at the locking ring.

7. Unscrew the screw at the upper locking ring 1 (Fig. 5) by max. 2 revolutions.
8. Insert the saw blade into the upper locking ring.
9. Push down the tightening screw for the saw blade 3 so far, that the saw blade is positioned approx. 10 mm deep in the locking ring.
10. Tighten the screw at the locking ring.
11. Check that the saw blade guide 2 (Fig. 5) is positioned correctly against the saw blade.
12. Tension the saw blade using the tightening screw 3. The necessary voltage is dependent on the thickness and type of material to be processed. It is best to find the correct voltage by trial and error.
13. Close the sliding door 11 (Fig. 1).
14. Insert the mains plugs.

Connecting the vacuum cleaner

For longer periods of operation, we recommend connecting the saw to a vacuum cleaner. To this end, connect the vacuum cleaner at the connection tube 19 (Fig. 1) using the attached rubber adapter.

Working with the scroll saw

1. Set the stroke rate with the speed regulation 16 (Fig. 1). High stroke rate for wood, aluminum, brass and boards. Low stroke rates for plastics, particularly thin materials and for extremely fine work.
2. Adjust the saw blade guide. For this, release screw 6 (Fig. 1), set the saw blade guide 17 (Fig. 1) as deeply as possible and re-tighten the screw.
3. When sawing, press the work piece firmly onto the work surface, in order to avoid vibrations. Then saw the work piece with feeling and with little feed.
Thus: high pressure against the work top – little pressure against the saw blade.
4. When sawing with the longitudinal stop, release the clamping screw 1 (Fig. 6), set the stop and retighten the clamping screw.
5. When sawing with the angle stop, release the clamping screw 1 (Fig. 7), adjust the angles according to the scale and retighten the clamping screw. Then press the work piece lightly against the stop and slide the stop along the groove 2.

Note:

please remember that with a scroll saw, the saw blade fundamentally tries to follow the grain of the wood. For frequent even cuts, a circular saw is therefore always preferable to a scroll saw.

Maintenance

Important

Pull out the mains plug prior to commencing all maintenance and repair work.

Warning!

Turn switch OFF and always remove plug from power source before making any adjustments or repairs.

If any part is missing or damaged, do not plug the tool in until the missing or damaged part is replaced, and assembly is complete. To avoid electrical shock, use only identical replacement parts when servicing double insulated tools.

Warning!

To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner, or similar highly volatile solvents to clean the circular saw.

Do not allow brake fluids, gasoline, or penetrating oils to come in contact with the plastic parts. They contain chemicals that can damage or destroy plastics!

All electrical or mechanical repairs (expect the changing of the belt) should be done only by qualified service technicians.

When servicing use only PROXXON replacement parts.

Use of any other parts may create a hazard or cause product damage.

Any attempt to repair or replace electrical parts on this tool may create a hazard unless repair is done by a qualified service technician.

Repair service is available at your PROXXON service center

(You find the address at address at the back of this manual).

Replacing the toothed belt

Important

Pull out the mains plug prior to commencing all maintenance and repair work.

If the toothed belts becomes worn it is possible to change it yourself. You can order replacement belts from the PROXXON central service team (address on the rear side of these instructions).

1. Remove mains plug.
2. Remove the saw blade.
3. Unscrew screws 2 (Fig. 8) in the work top.
4. Unscrew screws 4 in the lower part of the housing 3.
5. Unscrew screws 3 (Fig. 9) and remove the work top 2 from the transmission 1.
6. Unscrew screws 1 (Fig. 10) and remove the guide plate 2 with pistons 3.
7. Unscrew the motor attachment screws 4 inside the transmission case 8 and pull out the motor 5 with pinion.
8. Unscrew the motor threaded pins of the toothed washer 6 using an Allen key and pull out the shaft with eccentric cam.
9. Remove toothed washer 6 and insert new toothed belts.
10. Position the toothed washer 6 with toothed belts in the transmission case in such a way that the shaft with eccentric cam can be re-inserted.
11. Insert the motor 5 back in the transmission case and put the toothed belts on the motor pinion (this requires sensitive fingers and patience).
12. Re-bolt the motor with the transmission case.
13. Grease piston 3 with the eccentric cam, fasten guide plate 2.
14. Tighten the threaded pin of the toothed washer 6.
15. Re-screw the transmission to the work top, attach the lower part of the housing and fasten the work top to the housing.

Spare parts list

Please order spare parts in writing from PROXXON Central Service (Address on back of instruction manual)

Scroll saw DS 115 E

Article No. 37 088

Part No.:	Designation	Part No.:	Designation
37088-01	Housing upper part	37088-48	Guide rod clamp screw
37088-02	Housing lower part	37088-49	Allen key
37088-03	Sliding door	37088-51	Coil spring
37088-04	Gear unit housing	37088-52	Plunger
37088-05	Bearing bushing	37088-53	Bearing bushing
37088-06	Motor with fastening plate and pinion	37088-54	Saw bow
37088-07	Motor fastening bolt	37088-55	Saw bow fastening screws
37088-08	Gear unit fastening bolt	37088-56	Ball bearing
37088-09	Switch	37088-57	Rubber adapter for vacuum cleaner connection
37088-10	Power lead with plug	37088-58	Toothed belt
37088-11	Work platform	37088-59	Fixing bolt
37088-12	Angular stop, complete	37088-60	Board
37088-13	Bolt	37088-61	Control knob
37088-14	Bolt	37088-62	Coil spring
37088-16	Longitudinal stop, complete	37088-63	Lock
37088-32	Slide gate housing part 1	37088-64	Pin
37088-33	Slide gate housing part 2	37088-65	Strain relief
37088-34	Shaft	37088-66	Strain relief screw
37088-35	Pin	37088-67	Slide gate piece
37088-36	Plunger	37088-70	Air hose
37088-37	Pulley with set screw	37088-71	Air bellows
37088-39	Clamping bush	37088-72	Upper clamping ring complete with air bellows holder
37088-40	Clamping bush screw	37088-73	Clamping bolt for saw blade
37088-41	Tensioning screw	37088-97	Packaging
37088-42	Fixing bolts	37088-99	Operating Instructions (incl. safety information)
37088-44	Guide rod		
37088-45	Hold-down device complete with jet and roller		
37088-47	Vertical adjustment		